

Title (en)

Reliability detection of channel quality indicator (CQI) and application to outer loop power control

Title (de)

Zuverlässigkeitserkennung des CQI und Anwendung zur Sendeleistungsregelung

Title (fr)

Détection de la fiabilité d'un indicateur de qualité de canal et application pour le contrôle de la puissance de la boucle externe

Publication

**EP 2393250 A1 20111207 (EN)**

Application

**EP 10189766 A 20031202**

Priority

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- US 43856003 P 20030106
- US 43085402 P 20021204

Abstract (en)

A method for improving the reliability of a channel quality indicator (CQI) message in a wireless communications network begins with receipt of the CQI message. The CQI message is then decoded, and a decision metric value for each symbol in the CQI message is computed. A largest decision metric value and a second largest decision metric value for the CQI message are determined. The reliability of the CQI message can be determined by comparing the two largest decision metric values. This method may be applicable to high-speed downlink packet access in time division duplex, frequency division duplex, or other modes of transmission.

IPC 8 full level

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CPC (source: EP KR US)

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Citation (search report)

- [AP] WO 03087978 A2 20031023 - INTERDIGITAL TECH CORP [US]
- [A] US 2001040880 A1 20011115 - CHEN TAO [US], et al
- [A] US 5778317 A 19980707 - KAMINSKY ALAN RICHARD [US]
- [A] US 5757846 A 19980526 - VASUDEVAN SUBRAMANIAN [US]
- [AP] WO 03073644 A1 20030904 - QUALCOMM INC [US]

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IT LI LU MC NL PT RO SE SI SK TR

DOCDB simple family (publication)

**WO 2004051872 A2 20040617**; **WO 2004051872 A3 20041014**; AR 042292 A1 20050615; AT E509455 T1 20110515; AU 2003293230 A1 20040623; AU 2003293230 B2 20070118; AU 2007201359 A1 20070419; AU 2007201359 B2 20090521; AU 2009210374 A1 20090910; AU 2009210374 B2 20120726; BR 0316590 A 20051004; CA 2508525 A1 20040617; CA 2508525 C 20101116; CN 101505539 A 20090812; CN 101505539 B 20150909; DK 1568185 T3 20110711; EP 1568185 A2 20050831; EP 1568185 A4 20060104; EP 1568185 B1 20110511; EP 2393250 A1 20111207; GE P20105058 B 20100726; IL 168896 A 20101130; IL 202323 A 20121031; JP 2006509478 A 20060316; JP 2007325314 A 20071213; JP 2011223617 A 20111104; JP 2013102499 A 20130523; JP 2014187710 A 20141002; JP 2015213351 A 20151126; JP 2015216668 A 20151203; JP 2018011345 A 20180118; JP 4726494 B2 20110720; JP 4964711 B2 20120704; JP 5548847 B2 20140716; JP 5820019 B2 20151124; JP 5997058 B2 20160921; JP 6640477 B2 20200205; KR 101017040 B1 20110223; KR 101038462 B1 20110601; KR 20050085370 A 20050829; KR 20050096202 A 20051005; MX PA05005932 A 20050818; MY 135263 A 20080331; MY 156238 A 20160129; NO 20053094 L 20050623; SG 160204 A1 20100429; SG 2011088952 A 20150129; TW 200415926 A 20040816; TW 200518496 A 20050601; TW 200737784 A 20071001; TW I262730 B 20060921; TW I337018 B 20110201; TW I342686 B 20110521; US 10349351 B2 20190709; US 2004110473 A1 20040610; US 2009221329 A1 20090903; US 2011299447 A1 20111208; US 2012250525 A1 20121004; US 2013223316 A1 20130829; US 2016345263 A1 20161124; US 2018063787 A1 20180301; US 7536154 B2 20090519; US 8010053 B2 20110830; US 8204450 B2 20120619; US 8428522 B2 20130423; US 9414314 B2 20160809; US 9807690 B2 20171031

DOCDB simple family (application)

**US 0338243 W 20031202**; AR P030104466 A 20031204; AT 03790222 T 20031202; AU 2003293230 A 20031202; AU 2007201359 A 20070328; AU 2009210374 A 20090818; BR 0316590 A 20031202; CA 2508525 A 20031202; CN 200910002930 A 20031202; DK 03790222 T 20031202; EP 03790222 A 20031202; EP 10189766 A 20031202; GE AP2003009954 A 20031202; IL 16889605 A 20050530; IL 20232309 A 20091125; JP 2004570988 A 20031202; JP 2007224863 A 20070830; JP 2011133723 A 20110615; JP 2013002017 A 20130109; JP 2014115191 A 20140603; JP 2015129488 A 20150629; JP 2015129489 A 20150629; JP 2017177461 A 20170915; KR 20057010170 A 20031202; KR 20057016974 A 20031202; MX PA05005932 A 20031202; MY PI20034624 A 20031203; MY PI20071879 A 20031203; NO 20053094 A 20050623; SG 2007039597 A 20031202; SG 2011088952 A 20031202; TW 92133945 A 20031202; TW 93120814 A 20031202; TW 95145060 A 20031202; US 201113214490 A 20110822; US 201213524348 A 20120615; US 201313862735 A 20130415; US 201615230919 A 20160808; US 201715797439 A 20171030; US 46431209 A 20090512; US 72637403 A 20031203